

CLAIMS:

1. A communication station (1) which is suitable for contactless communication with transponders and with other communication stations and which comprises first signal-processing means (28) that are designed for processing signals and enable signals to be processed using at least one transmission parameter in a communication between the communication station (1) and at least one transponder, and which comprises second signal-processing means (29) that are designed for processing other signals and enable the other signals to be processed using at least one other transmission parameter in a communication between the communication station (1) and at least one other communication station, wherein the at least one transmission parameter for processing the signals with the first signal-processing means (28) and the at least one transmission parameter for processing the other signals with the second signal-processing means (29) are transmission parameters differing from each other.
2. A communication station (1) as claimed in Claim 1, wherein the first signal-processing means (28) comprise first encoding means (30) and first decoding means (31), which first encoding means (30) and first decoding means (31) are developed for processing signals according to at least one first coding type as the transmission parameter, and the second signal-processing means (29) comprise second encoding means (34) and second decoding means (35), which second encoding means (34) and second decoding means (35) are developed for processing the other signals according to at least one second coding type as the transmission parameter.
3. A communication station (1) as claimed in Claim 2, wherein the first encoding means (30) are developed for processing the signals according to a Miller code, and the first decoding means (31) are developed for processing the signals according to a Manchester code.

4. A communication station (1) as claimed in Claim 2, wherein the second encoding means (34) and the second decoding means (35) are developed for processing the other signals according to an NRZ code.

5 5. A communication station (1) as claimed in Claim 1, wherein the first signal-processing means (28) comprise first modulation means (32) and first demodulation means (33), which first modulation means (32) and first demodulation means (33) are developed for processing signals according to a first modulation type, and the second signal-processing means (29) comprise second modulation means (36) and second demodulation means (37),
10 which second modulation means (36) and second demodulation means (37) are developed for processing the other signals according to a second modulation type.

15 6. A communication station (1) as claimed in Claim 5, wherein the first modulation means (32) are formed by amplitude modulation means and the first demodulation means (33) are formed by amplitude demodulation means.

7. A communication station (1) as claimed in Claim 5, wherein the second modulation means (36) are formed by phase modulation means and the second demodulation means (37) are formed by phase demodulation means.

20 8. A communication station (1) as claimed in Claim 7, wherein the phase modulation means and the phase demodulation means are developed to process the other signals according to the BPSK method.

25 9. An integrated circuit (2) for a communication station (1) which is suitable for contactless communication with transponders and with other communication stations, wherein the integrated circuit (2) comprises first signal-processing means (28) that are designed for processing signals and enable signals to be processed using at least one transmission parameter in a communication between the communication station (1) and at least one transponder, and the integrated circuit (2) comprises second signal-processing means (29) that are designed for processing other signals and enable the other signals to be processed using at least one other transmission parameter in a communication between the communication station and at least one other communication station (1), and wherein the at least one transmission parameter for processing the signals with the first signal-processing

means (28) and the at least one transmission parameter for processing the other signals with the second signal-processing means (29) are transmission parameters differing from each other.

5 10. An integrated circuit (2) as claimed in Claim 9, wherein the first signal-processing means (28) comprise first encoding means (30) and first decoding means (31), which first encoding means (30) and first decoding means (31) are developed for processing signals according to at least one first coding type as the transmission parameter, and the second signal-processing means (29) comprise second encoding means (34) and second decoding means (35), which second encoding means (34) and second decoding means (35) are developed for processing other signals according to at least one second coding type as the transmission parameter.

15 11. An integrated circuit (2) as claimed in Claim 10, wherein the first encoding means (30) are developed for processing the signals according to a Miller code, and the first decoding means (31) are developed for processing the signals according to a Manchester code.

20 12. An integrated circuit (2) as claimed in Claim 10, wherein the second encoding means (34) and the second decoding means (35) are developed for processing the other signals according to an NRZ code.

25 13. An integrated circuit (2) as claimed in Claim 9, wherein the first signal-processing means (28) comprise first modulation means (32) and first demodulation means (33), which first modulation means (32) and first demodulation means (33) are developed for processing signals according to a first modulation type, and the second signal-processing means (29) comprise second modulation means (36) and second demodulation means (37), which second modulation means (36) and second demodulation means (37) are developed for processing the other signals according to a second modulation type.

30 14. An integrated circuit (2) as claimed in Claim 13, wherein the first modulation means (32) are formed by amplitude modulation means and the first demodulation means (33) are formed by amplitude demodulation means.

15. An integrated circuit (2) as claimed in Claim 13, wherein the second modulation means (36) are formed by phase modulation means, and the second demodulation means (37) are formed by phase demodulation means.

5 16. An integrated circuit (2) as claimed in Claim 15, wherein the phase modulation means and the phase demodulation means are developed to process the other signals according to the BPSK method.